

CLAIMS

What is claimed is:

1. A method for recording data by a tape drive, said method comprising:

recording a set of data and a data freshness degree associated with said set of data a tape recording medium, wherein said data freshness degree indicates how new said set of data is with respect to a set of previously-recorded data;

determining whether or not a fault occurs during said recording of said set of data on said tape recording medium;

in response to a determination that a fault occurs during said recording, reading a data freshness degree of data within said faulty portion on said tape recording medium; and

recording said data freshness degree of said set of data immediately before said faulty portion on said tape recording medium, wherein said data freshness degree is higher than said data freshness degree of data within said faulty portion.

2. The method of Claim 1, wherein said method further includes continuously recording data and data freshness degrees in portions subsequent to said faulty portion on said tape recording medium using a data freshness degree that is equal to or higher than said data freshness degree of said set of data immediately before said faulty portion.

3. The method of Claim 1, wherein said method further includes in response to a last set of data to be sequentially recorded on said tape recording medium,

reading a data freshness degree of a predetermined area ahead of a location on said tape recording medium in which said last set of data is to be recorded; and

recording a data freshness degree of said last set of data, wherein said data freshness degree of said last set of data is higher than said data freshness degree of said predetermined area.

4. The method of Claim 1, wherein said method further includes:

acquiring a written data freshness degree from said tape recording medium;

determining whether or not said written data freshness degree is erroneous;

determining a faulty portion freshness degree of a faulty portion on said tape recording medium; and

recording a data freshness degree immediately before said faulty portion, wherein said data freshness degree is higher than said faulty portion freshness degree.

5. A tape drive comprising:

means for recording a set of data and a data freshness degree associated with said set of data a tape recording medium, wherein said data freshness degree indicates how new said set of data is with respect to a set of previously-recorded data;

means for determining whether or not a fault occurs during said recording of said set of data on said tape recording medium;

in response to a determination that a fault occurs during said recording, means for reading a data freshness degree of data within said faulty portion on said tape recording medium; and

means for recording said data freshness degree of said set of data immediately before said faulty portion on said tape recording medium, wherein said data freshness degree is higher than said data freshness degree of data within said faulty portion.

6. The tape drive of Claim 5, wherein said tape drive further includes means for continuously recording data and data freshness degrees in portions subsequent to said faulty portion on said tape recording medium using a data freshness degree that is equal to or higher than said data freshness degree of said set of data immediately before said faulty portion.

7. The tape drive of Claim 5, wherein said tape drive further includes in response to a last set of data to be sequentially recorded on said tape recording medium,

means for reading a data freshness degree of a predetermined area ahead of a location on said tape recording medium in which said last set of data is to be recorded; and

means for recording a data freshness degree of said last set of data, wherein said data freshness degree of said last set of data is higher than said data freshness degree of said predetermined area.

8. The tape drive of Claim 5, wherein said tape drive further includes:

means for acquiring a written data freshness degree from said tape recording medium;

means for determining whether or not said written data freshness degree is erroneous;

means for determining a faulty portion freshness degree of a faulty portion on said tape recording medium; and

means for recording a data freshness degree immediately before said faulty portion, wherein said data freshness degree is higher than said faulty portion freshness degree.